

Appl. No. 09/441,805
Amdt. Dated April 8, 2004
Reply of Office Action of February 9, 2004

Remarks/Arguments

Claims 1-14 are pending in the application. In the Action, the Applicants rebuttal of the prior rejections of claims 1-14 set forth in the Action dated 8/13/03 were deemed not persuasive. Applicants respectfully request that the rejections be reconsidered and withdrawn.

In the Action, independent claims 1 and 11 were deemed obvious in view of U.S. Patent No. 6,040,933 ("Khaleghi"). In the Action, it is conceded that:

- 1) "Khaleghi fails to specifically teach that the information transmitted at a first bit transmission rate and first signal power to a first receiver without regeneration would require at least one of electrical regeneration and optical regeneration to reach a second receiver"; and,
- 2) "Khaleghi fails to specifically teach that the at least one signal wavelength and bit transmission rate of each of said plurality of transmitters is selected to allow the transmission of the information via the signal wavelength to at least a corresponding one or said plurality of said receivers without regeneration".

The Action suggests that because optical amplifiers and regeneration are known in the art to overcome range limitations in systems, the claimed invention and these express limitations are obvious. Regeneration and optical amplification are unquestionably known in the art as a means to overcome range limitations. However, optical amplifiers and regeneration are not the missing limitations and their use in combination with Khaleghi is not what is claimed. It is a specific system configuration that alleviates the need for regeneration at certain locations in a system, irrespective of optical amplification, as set forth in the above limitations and the remainder of the claims. And this specific

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configuration has not been disclosed, suggested or taught in any cited reference including Khaleghi, either alone or in combination.

Khaleghi in view of optical amplifiers and regeneration merely teaches that Khaleghi systems can employ optical amplifiers and can be concatenated via regeneration, if necessary to overcome range limitations, which is not what is claimed. Khaleghi does suggest the combination of its teaching with the missing limitations and hence the rejection is improper because the level of skill in the art cannot be relied upon to provide the suggestion to combine references. See Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

The Action further states in rejecting claims 1 and 11 that Khaleghi discloses a second receiver at a different destination in that "receiver Rx2 is at a different location than receiver Rx1 as seen in Figure 1". Khaleghi clearly does not teach that limitation as the cited receivers Rx1 and Rx2 are actually part of the same terminal 14 (See Fig. 1 & col. 3, lines 40-42). In addition, the cited passages of Khaleghi, col. 6, lines 6-13, describe a technique for equalizing the performance of channels with different bit rates for transmission between two terminals, which teaches completely away from the present invention. The suggested modifications of Kaleghi would change its principle of operation, thus its use to render the claims obvious is not proper. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The Action also maintains that Khaleghi discloses a "continuous optical path" as required in claim 3, because "[r]egardless of the termination at both ends of the optical path, the optical path remains continuous between the transmitter and receiver." However, that disclosure is simply not a continuous optical path as used in the claims and set forth in the specification. See, for example, page 5, lines 3-6, "the system can be configured to include continuous optical paths that accommodate the ingress and egress of signal wavelengths at various bit rates without terminating the optical path." The mere fact

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that Khaleghi is recognized as terminating the optical path makes it clear that it does not disclose or teach a continuous optical path, as it is used in the claims and defined in the specification. Like the arguments concerning claims 1 and 11, there is no cited art that discloses, suggests, and/or teaches the claimed continuous optical path; therefore, the rejection should be withdrawn.

Furthermore, the Action suggests that there is no structural difference between the disclosure in U.S. Patent No. 5,938,309 ("Taylor") and the claimed invention. However, Taylor is cited as a secondary obviousness reference over another obviousness reference Khaleghi, which the Action concedes does not disclose the claimed invention. As such, the argument that there are no structural differences between the claimed invention and Taylor is not supported by the Action itself.

In fact, the system limitation described in Taylor, col. 3, lines 43-46 ("Although a WDM optical signal can be comprised of individual channels of different data rates, the overall operating efficiency of the system is improved when each optical channel is at the same data rate.") is the limitation introduced by the cited section of Khaleghi ("As mentioned earlier, if the signals transmitted by their respective channels have different bit rates, then a bit rate dependent offset should be used when adjusting the optical power of the transmitters of those channels for the purpose of equalizing channel performance." col. 6, lines 6-13). Hence, combining Taylor with Khaleghi might in fact result in Taylor, which the Action already concedes does not disclose the claimed invention. In addition, as both of the above disclosures teach away from the claimed invention, it is improper to combine references to render the claim obvious. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

The Actions concede that the cited references do not disclose various limitations in the claims, individually or collectively. In addition, the argument concerning the knowledge of one of ordinary skill were not that the limitations were known, but that

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those limitations would be obvious in view of the fact that the broad concepts of regeneration and optical amplification are known in the art. In view of the absence of various limitations from the prior art of record and the lack of any suggestion to combine or modify, Applicants submit that the claimed invention is patentable over the prior art of record. As such, Applicants respectfully request that the present rejections be withdrawn and a Notice of Allowance be issued for claims 1-14 in this case.

Applicants believe that no additional fees are due with this response. However, the Commissioner is authorized to charge any fees, including those under 37 CFR 1.16 and 1.17, necessitated by this amendment and credit any overpayments to Deposit Account No. 500477.

Respectfully submitted,

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